

REMARKS

Responsive to the Office action mailed October 22, 2008, applicants request entry of the foregoing amendments, consideration of the following remarks and reconsideration of the rejections set forth in said office action. A Request for Continued Examination and a petition for a two month extension of time and required fees are filed herewith.

Claims 1-10 were rejected under 35 USC 102(e) or alternatively under 35 USC 103 (a) as being anticipated by Artuphel, Benoit (US20060052268). Applicants respectfully submit that Artuphel et al. '268 is not a proper reference under 35 USC 102(e) or 35 USC 103 (a).

Artuphel et al. '268 was published March 9, 2006 based upon an application which entered the US national phase under 35 USC 371 on May 19, 2005 from a PCT application, which published in French, filed on January 13, 2004. The present application entered the US national phase under 35 USC 371 on February 22, 2006 claiming priority to a PCT application filed January 22, 2006. Because the PCT priority case of Artuphel et al. '268 published in French, its effective date as a reference under 35 USC 102 (e) is its date of entry into the US national phase, May 19, 2005. The effective US filing date of the present application is the filing date of the PCT application which designated the US, July 3, 2004, prior to the effective reference date of Artuphel et al. '268. Thus, Artuphel et al. '268 was not filed in the US before the invention by the applicants. 35 USC 102(e) specifically states that "... except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States **only if** the international application designated the United States and was **published** under Article 21(2) of such treaty **in the English language.**" (Emphasis added). Applicants submit that since the Artuphel et al. '268 PCT priority application published in French, its effective date as a reference under 35 USC 102(e) is May 19, 2005, subsequent to the filing date of the present application, and the rejections under 35 USC 102(e) and 103(a) are improper and must be withdrawn.

Claims 1-10 were rejected under 35 USC 102(b) or alternatively under 35 USC 103(a) as being

rendered obvious by Yamada et al. '759. Applicants respectfully submit that Yamada et al. '759 fails to anticipate or render obvious the invention as presently claimed.

The present invention is directed towards the discovery of a composition comprising a fluorinated base, secondary butanol and DMSO, the novel compositions being particularly suitable for the defluxing of electronic boards containing "no clean" solder fluxes as well as other solder fluxes. The "fluorinated base" of the present invention is intended to mean a mixture of one or more fluorinated compounds having a surface tension of less than 30 mN/m at 25°C (measured according to the ISO 304 standard) and a negligible action on the ozone layer (zero or negligible ODP). The fluorinated compound(s) can be chosen from hydrofluorocarbons (HFCs) and/or hydrofluoro ethers (HFEs). The compositions according to the present invention, as currently claimed, comprises from 15-25% by weight of fluorinated base, from 50 to 70% by weight of secondary butanol and from 15 to 25% by weight of DMSO, the sum of the percentages by weight of the constituents being equal to 100. A majority, 50% or more, of the composition of the present invention is secondary butanol. As currently amended, the composition of the present invention comprises from 15 to 25% by weight DMSO. Example 1 and comparative example 2 shows the significant improvement in flux removal rate for a composition that comprises the three components of the present invention in contrast to a composition of just fluorinated base and sec-butanol.

Yamada et al. '759 discloses a fluorinated hydrocarbon with excellent cleaning action. Applicants submit that Yamada et al. 759 fails to disclose a composition comprising 50% or more of sec-butanol or containing DMSO. At column 7, lines 51-60, Yamada et al. '759 discloses that the fluorinated hydrocarbon component of Yamada's composition is the principal component. Thus, the "other" components of the composition disclosed by Yamada et al. '759 cannot comprise 50% or more of the composition. At column 7, line 31 Yamada et al. '759 discloses the use of 8.4% of 2-butanol in a composition of that invention. Furthermore, there is no disclosure, either express or implied of the inclusion of DMSO in Yamada et al. '759. Applicants submit that Yamada et al. '759 fails to anticipate or render obvious the specific combination of the present invention which requires 50% or more of sec-butanol and at least 15% by weight DMSO in a compositions being particularly suitable for

the defluxing of electronic boards. Applicants submit that Yamada et al. '759 to anticipate or render obvious the present invention and the rejection should be withdrawn.

Claims 1-10 were rejected under 35 USC 102(b) or alternatively under 35 USC 103(a) as being rendered obvious by Tsuzaki '456. Applicants respectfully submit that Tsuzaki '456 fails to anticipate or render obvious the present invention as currently claimed.

Tsuzaki '456 discloses a solvent composition comprising a combination of dichloropentafluoropropane and (perfluorobutyl)methyl ether in a specified range of ratios. It is disclosed that at most 40% of a wide variety of materials including alcohols can be added to adjust solvency. Applicants submit that there is no disclosure either express or implied of the specific combination of the present invention which requires 50% or more of sec-butanol in combination with a fluorinated base and DMSO in a compositions being particularly suitable for the defluxing of electronic boards. Furthermore, there is no disclosure, either express or implied in Tsuzaki '456 of the inclusion of DMSO. Applicants submit that Tsuzaki '456 fails to anticipate the specific combination of the present invention which requires 50% or more of sec-butanol and at least 15% by weight DMSO in a compositions being particularly suitable for the defluxing of electronic boards. Applicants submit that Tsuzaki '456 fails to anticipate or render obvious the specific combination of the present invention as presently claimed and the rejection should be with. withdrawn

Claims 1-10 were rejected under 35 USC 102(b) or alternatively under 35 USC 103(a) as being rendered obvious by Behr et al. '090. Applicants respectfully submit that Behr et al. '090 fails to anticipate or render obvious the present invention as currently claimed.

Behr et al. '090 discloses a composition comprising perfluoroalkyl haloalkyl ethers and optionally surfactants. At column 9, line 16, Behr et al. '0090 discloses the use of co-solvents. The relative amounts of the components is disclosed at column 9, lines 26-32. The composition of Behr, et al. '090 is disclosed as comprising 50 –99 parts of the perfluoroalkyl haloalkyl ether component per 100 parts of combined ether and co-solvent. Applicants submit that with the disclosed relative amounts of Behr, et al. '090 the co-solvent can not comprise 50% or more of the composition. Furthermore, there is no disclosure, either express or implied of the inclusion of DMSO in Behr et al. '090. Applicants submit

that Behr et al. '090 fails to anticipate or render obvious the specific combination of the present invention which requires 50% or more of sec-butanol and at least 15% by weight DMSO in a compositions being particularly suitable for the defluxing of electronic boards. Applicants submit that Behr et al. '090 fails to anticipate or render obvious the specific combination of the present invention and the rejection should be withdrawn.

In view of the foregoing remarks, applicant respectfully submits that claims 1 and 3-10 of the present application are in condition for allowance and prompt favorable action is solicited.

Respectfully submitted,

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